San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

NOV 1 2 2014

Mr. Bryon McGregor
Pacific Ethanol Stockton, LLC
3028 Navy Drive
Stockton, CA 95206

Re: Notice of Minor Title V Permit Modification
District Facility # N-7365
Project # N-1133568

Dear Mr. McGregor:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued N-7365-11-4 into the Title V operating permit. The ATC is for the modification of permit unit N-7365-11 to install a corn oil extraction process and associated equipment.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued N-7365-11-4, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,

Arnaud Marjollet
Director of Permit Services

Enclosures

cc: Gerardo C. Rios, EPA (w/enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

TITLE V APPLICATION REVIEW

Minor Modification
Project #: N-1133568

Engineer: Thom Maslowski
Date: November 10, 2014

Facility Number: N-7365
Facility Name: Pacific Ethanol Stockton, LLC
Mailing Address: 3028 Navy Drive
Stockton, CA 95206

Contact Name: Bryon McGregor
Phone: (209)235-0370

Responsible Official: Bryon McGregor
Title: Chief Operating Officer

I. PROPOSAL

Pacific Ethanol Stockton is proposing a Title V minor permit modification to incorporate the recently issued ATC N-7365-11-4 into the Title V operating permit. The ATC is for the modification of permit unit N-7365-11 to install a corn oil extraction process and associated equipment.

The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with the applicable requirements and to provide the legal and factual basis for the proposed revisions.

II. FACILITY LOCATION

3028 Navy Drive in Stockton, CA

III. EQUIPMENT DESCRIPTION

N-7365-11-5: WET CAKE PROCESS CONSISTING OF ONE 194,400 GALLON WHOLE STILLAGE TANK, ONE CENTRIFUGE SYSTEM WITH FIVE CENTRIFUGES, ONE 127,000 GALLON THIN STILLAGE TANK, THREE EVAPORATORS, ONE 129,600 GALLON SYRUP TANK, CORN OIL EXTRACTION SYSTEM CONSISTING OF ONE 36,000 GALLON HEAT SOAK TANK, THREE CENTRIFUGES, ONE 800

GALLON BUFFER TANK, ONE 1,285 GALLON FINAL PRODUCT TANK, TWO 10,500 GALLON CORN OIL LOADOUT STORAGE TANKS ALL SERVED BY AN KOTCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-4, '-5, '-6, '-9 AND '-10) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-7, '-8, '-9 AND '-10) AND A TRUCK LOADOUT SYSTEM

IV. SCOPE OF EPA AND PUBLIC REVIEW

This change to a Title V permit is considered to be a minor modification and, as such, requires no public review.

V. APPLICABLE REQUIREMENTS

District Rule 2520, Federally Mandated Operating Permits (Adopted June 21, 2001)

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

Pacific Ethanol Stockton is proposing to install equipment to allow for extracting corn oil from the final syrup co-product. The only existing plant process associated with this project is the stillage corn syrup product that is stored in tank TK-5104, syrup tank. The project will intercept the current syrup stream and process out a portion of the corn oil and return the rest of the stream to the syrup tank to be used as the existing final co-product distiller's syrup only with less available fat.

The corn oil recovery system will be comprised to five major process subsystems:

1) Heat and soak system
2) Primary Centrifugal Separation System (PCSS) primary separation
3) Oil Plus treatment
4) Seconary Centrifugal Separation System (SCSS) final oil separation
5) Storage and loadout

Heat and Soak System

The feed material will be taken from the syrup stream leaving the three stage plant vacuum evaporation system prior to entry into the existing syrup tank (TK-

5104). This stream is a two phase stream of liquid and solid. This syrup passes through a non-contact heating/cooling system to bring the syrup stream from a nominal 130 °F up to processing temperature of 195-205 °F. The heat from the non-contact heating/cooling system will be provided by heat exchange from an existing process stream. If there is insufficient heat from this heat exchange, steam will be directly injected from the existing facility boilers. This heated syrup stream will then be fed into the heat soak tank (TK-13130) where it will be allowed to remain at temperature for several hours to allow oil to coalesce in the syrup. Hot syrup from the heat soak tank will be fed to the PCSS via a pump.

The goal of this heat soak tank is to provide residence time at elevated temperature under mild mixing to coalesce the free oil droplets and aid recovery of oil from the syrup and to provide a wide spot in the line to moderate and accommodate fluctuations in the syrup feed flow, composition, or temperature.

It is expected that there is some flexibility around the amount of time that the material is held. The oil contained in the syrup may be difficult to separate and achieve the desired yield. There is also a potential for large fractions of emulsion in the PCSS centrifuge light phase material and increased chemical processing requirements. In these cases, the hold time would be short, including zero. On the other hand, the coalescence may continue to the point where there is no recoverable emulsion and th light phase material can no longer meet the quality specification required. In this case, the hold time would be extended, above six hours. The system is designed to operate in a range of two to six hours of holdup, under normal operation, with a nominal target of four hours. It is expected that this range will cover the optimum recovery established for this facility yet allow flexibility to capture and process the fluctuations in the source feed flow and the washing operations inside of the Oil Plus system.

PCSS Primary Separation

The PCSS units separate the light phase material, containing free oil, oily emulsion, and some water and solids, from the feed stream. The de-oiled syrup (containing the bulk of the aqueous and solid fractions) that remains after the light phase material is removed from the feed stream will exit the PCSS as heavy phase material and is collected in the return tanks attached to the PCSS skids.

The de-oiled syrup/heavy phase material will be pumped back through the syrup heating/cooling system by the PCSS return pumps to be cooled back down prior to its entry into the existing syrup tank (TK-5104). The separated light phase material will be sent forward to the next phase of the system, the Oil Plus chemical treatment system. The PCSS units will be flushed periodically with hot water to prevent buildup, and periodically washed using the plant's dilute NaOH CIP system.

Oil Plus Treatment

The light phase material fowarded from the PCSS units will be collected in the Oil Plus buffer tank (TK-13400) to accommodate variations in light phase material flow. From the Oil Plus buffer tank, the light phase material will be metered through the Oil Plus chemical treatment system. Flow to the treatment system will be controlled by a flow controller which modulates the pump speed to maintain a constant flow through the pH adjustment system and into the SCSS. The light phase material from the pump discharge will be treated with clean ~3.5% NaOH solution to adjust its pH and liberate additional oil from the oily emulsion in the light phase material. During normal operation, this adjustment is controlled by a pH controller and measured by a pair of pH meters. The feedback from the pH controller modulates the pump speed to control the NaOH addition to the light phase material stream upstream of the statis mixer and to reach the pH target.

SCSS Final Oil Separation

Once pH adjustment is completed, the treated light phase material will be fed into the SCSS to separate the recovered oil from the remaining water and residual solids. The SCSS unit is another skid-mounted certifuge. The recovered oil will leave the SCSS unit as the light phase, while the SCSS heavy phase, consisting primarily of water and solids wfrom the treated light phase material, will be returned to the PCSS return tanks for return to the syrup tank with the de-oiled syrup. The SCSS unit will be periodically flushed with hot water to prevent buildup, and periodically washed using the plant's dilute NaOH CIP system.

The light phase product from SCSS will be returned to the Oil Plus skid in the QC section. The QC.product section of the Oil Plus skid is primarily a decanting/settling system aimed at clarifying the product oil before it is transferred to the final product storage area. The QC tank (or Final Product tank) (TK-13700) incorporates a series of baffles and weirs to promote settling of water and solids from the oil product, as well as a skimming baffle to sequester any light impurities or foamy material that may be included in the oil product stream. The QC tank includes an automatic sump recycle to ensure that the oily water that has settled in the tank bottom does not build up to the point that it is carried on to overflow the final weir into the product section, nor does the oily water consume excessive volume and reducing settling time in the tank. This recycle operates based on the reading from a level controller to maintain the oily water level below a given set point. The recycled oily water is sent back to the feed of the PCSS skid for recovery of oil in the mixture.

The final product oil from the QC tank overflows a decanting weir into the production section and is pumped to the finished product tanks by a pump through the final product flow meter. This product oil is transferred into the product storage tanks (TK-13800 and TK-13801) from which it will be loaded into trucks for shipping.

Storage and Loadout

The loadout will be manually controlled and involve filling tank trucks via a piping arrangement similar to the current syrup loading system.

N-7365-11-5:

Permit conditions 11 through 15, 18, 19, 20 and 22 on the proposed Permit to Operate are new conditions specific to the corn oil extraction process.
All conditions from the current Permit to Operate were carried over to the proposed Permit to Operate

VII. COMPLIANCE

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include;
    a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
    b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and

6. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including;

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
2. The source's suggested draft permit; and
3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

VIII. ATTACHMENTS

A. Proposed Modified Title V Operating Permit No. N-7365-11-5
B. Authoriy to Construct No. N-7365-11-4
C. Emissions Increases
D. Application
E. Previous Title V Operating Permit No. N-7365-11-3

ATTACHMENT A

Proposed Modified Title V Operating Permit No.
(N-7365-11-5)

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-7365-11-5

EXPIRATION DATE: 09/30/2017

EQUIPMENT DESCRIPTION:
WET CAKE PROCESS CONSISTING OF ONE 194,400 GALLON WHOLE STILLAGE TANK, ONE CENTRIFUGE SYSTEM WITH FIVE CENTRIFUGES, ONE 127,000 GALLON THIN STILLAGE TANK, THREE EVAPORATORS, ONE 129,600 GALLON SYRUP TANK, CORN OIL EXTRACTION SYSTEM CONSISTING OF ONE 36,000 GALLON HEAT SOAK TANK, THREE CENTRIFUGES, ONE 800 GALLON BUFFER TANK, ONE 1,285 GALLON FINAL PRODUCT TANK, TWO 10,500 GALLON CORN OIL LOADOUT STORAGE TANKS ALL SERVED BY AN KOTCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-4, '-5, '-6, '-9 AND '-10) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-7, '-8, '-9 AND '-10) AND A TRUCK LOADOUT SYSTEM

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Wet cake conveyors between each tank or each emissions unit at the wet cake process unit shall be fully enclosed. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 60,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All vapors from the wet cake process shall be vented through the vent gas scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The overall control efficiency for the vent gas scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Controlled VOC emissions rate from the wet cake process served by the vent gas scrubber vented to the RTO shall not exceed 0.01161 lb-VOC/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Controlled VOC emissions rate from the slurry tank, yeast tank, liquefaction tank, distillation process, process condensate tank and wet cake process all served by the vent gas scrubber vented to the RTO shall not exceed 0.01161 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.07421 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Loading losses from the distiller's syrup or corn oil loadout operation shall not exceed 0.526 lb-VOC/1,000 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit

12. The maximum throughput of distiller's syrup loaded shall not exceed any of the following: 67,371 gallons per day or 24,590,415 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit

13. The maximum throughput of corn oil loaded shall not exceed any of the following: 26,000 gallons per day or 1,722,500 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Fugitive VOC emissions from equipment leaks associated with the corn oil operation shall not exceed 2.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Fugitive VOC emissions from equipment leaks associated with the distiller's syrup operation shall not exceed 2.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

16. Fugitive VOC emissions from equipment leaks associated with the wet cake process shall not exceed 2.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

17. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit

18. Fugitive VOC emissions from equipment leaks associated with the corn oil operation shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-9, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Leak Rate/Screening Value Correlations Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit

19. Fugitive VOC emissions from equipment leaks associated with the distiller's syrup operation shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-9, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Leak Rate/Screening Value Correlations Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit

20. The permittee shall maintain daily and annual records, in gallons, of the quantity of distiller's syrup and corn oil loaded at this facility. [District Rule 2201] Federally Enforceable Through Title V Permit

21. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

22. Permittee shall maintain accurate component count and shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit

23. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted within 120 days after initial start-up and at least once every twelve (12) months thereafter, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit

24. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit

25. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet) - RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit

26. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

27. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit

29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

30. The vent gas scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

31. The water flow rate through the vent gas scrubber shall not be less than 25 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

32. The permittee shall monitor and record the water flow rate through the vent gas scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

33. If the water flow rate through the vent gas scrubber is less than 25 gal/minute, the permittee shall correct the water flow rate to exceed 25 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the vent gas scrubber continues to be less than 25 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

34. The permittee shall maintain records of (1) the date of water flow rate measurements, (2) the water flow rate through the vent gas scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 25 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

35. The RTO shall be operated at a temperature of no less than 1,400 °F. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

36. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

37. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit

38. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit

39. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 °F limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

40. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit

41. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit

42. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit

44. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility wide permit N-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit

45. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit

46. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

47. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

48. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

ATTACHMENT B

Authority to Construct No.
(N-7365-11-4)

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

AUTHORITY TO CONSTRUCT

PERMIT NO: N-7365-11-4 **ISSUANCE DATE:** 01/31/2014

LEGAL OWNER OR OPERATOR: PACIFIC ETHANOL STOCKTON LLC
MAILING ADDRESS: 400 CAPITOL MALL, STE 2060
SACRAMENTO, CA 95814

LOCATION: 3028 NAVY DRIVE
STOCKTON, CA 95206

EQUIPMENT DESCRIPTION:
MODIFICATION OF WET CAKE PROCESS CONSISTING OF ONE 194,400 GALLON WHOLE STILLAGE TANK, ONE CENTRIFUGE SYSTEM WITH FIVE CENTRIFUGES, ONE 127,000 GALLON THIN STILLAGE TANK, THREE EVAPORATORS, AND ONE 129,600 GALLON SYRUP TANK, ALL SERVED BY AN KOTCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-4, '-5, '-6, '-9 AND '-10) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-7, '-8, '-9 AND '-10): ADD CORN OIL EXTRACTION SYSTEM CONSISTING OF ONE 36,000 GALLON HEAT SOAK TANK, THREE CENTRIFUGES, ONE 800 GALLON BUFFER TANK, ONE 1,285 GALLON FINAL PRODUCT TANK, TWO 10,500 GALLON CORN OIL LOADOUT STORAGE TANKS, AND A TRUCK LOADOUT SYSTEM

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 484 lb, 2nd quarter - 484 lb, 3rd quarter - 485 lb, and fourth quarter - 485 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]
3. ERC Certificate Number S-4021-1 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]
4. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services
N-7365-11-4 : Jan 31 2014 10:17AM – TOMS : Joint Inspection NOT Required

5. Wet cake conveyors between each tank or each emissions unit at the wet cake process unit shall be fully enclosed. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 60,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. All vapors from the wet cake process shall be vented through the vent gas scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The overall control efficiency for the vent gas scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Controlled VOC emissions rate from the wet cake process served by the vent gas scrubber vented to the RTO shall not exceed 0.01161 lb-VOC/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Controlled VOC emissions rate from the slurry tank, yeast tank, liquefaction tank, distillation process, process condensate tank and wet cake process all served by the vent gas scrubber vented to the RTO shall not exceed 0.01161 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.07421 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Loading losses from the distiller's syrup or corn oil loadout operation shall not exceed 0.526 lb-VOC/1,000 gallons. [District Rule 2201]
15. The maximum throughput of distiller's syrup loaded shall not exceed any of the following: 67,371 gallons per day or 24,590,415 gallons per year. [District Rule 2201]
16. The maximum throughput of corn oil loaded shall not exceed any of the following: 26,000 gallons per day or 1,722,500 gallons per year. [District Rule 2201]
17. Fugitive VOC emissions from equipment leaks associated with the wet cake process shall not exceed 2.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Fugitive VOC emissions from equipment leaks associated with the corn oil operation shall not exceed 2.7 lb/day. [District Rule 2201]
19. Fugitive VOC emissions from equipment leaks associated with the distiller's syrup operation shall not exceed 2.9 lb/day. [District Rule 2201]
20. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Fugitive VOC emissions from equipment leaks associated with the corn oil operation shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-9, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Leak Rate/Screening Value Correlations Emission Factors. [District Rule 2201]
22. Fugitive VOC emissions from equipment leaks associated with the distiller's syrup operation shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-9, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Leak Rate/Screening Value Correlations Emission Factors. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

23. The permittee shall maintain daily and annual records, in gallons, of the quantity of distiller's syrup and corn oil loaded at this facility. [District Rule 2201]

24. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

25. Permittee shall maintain accurate component count and shall update such records when new components are approved and installed. [District Rule 2201]

26. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted within 120 days after initial start-up and at least once every twelve (12) months thereafter, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit

27. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit

28. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet) - RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit

29. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

30. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

31. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit

32. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

33. The vent gas scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

34. The water flow rate through the vent gas scrubber shall not be less than 25 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

35. The permittee shall monitor and record the water flow rate through the vent gas scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

36. If the water flow rate through the vent gas scrubber is less than 25 gal/minute, the permittee shall correct the water flow rate to exceed 25 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the vent gas scrubber continues to be less than 25 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

37. The permittee shall maintain records of (1) the date of water flow rate measurements, (2) the water flow rate through the vent gas scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 25 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

38. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

39. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

40. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit

41. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit

42. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

43. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit

44. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit

45. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit

46. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit

47. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility wide permit N-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit

48. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit

49. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

50. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

51. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

ATTACHMENT C

Emissions Increases

	SSIPE (lb/yr)				
	NOx	VOC	CO	SOx	PM10
N-7365-11-5	0	1,936	0	0	0
TOTAL	**0**	**1,936**	**0**	**0**	**0**

ATTACHMENT D

Application

RECEIVED
NOV 07 2013
Permits Services
SJVAPCD

San Joaquin Valley Air Pollution Control District

www.valleyair.org

Permit Application For:

[ ] ADMINISTRATIVE AMENDMENT [X] MINOR MODIFICATION [ ] SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: Pacific Ethanol Stockton, LLC

2. MAILING ADDRESS:

STREET/P.O. BOX: **3028 Navy Drive**

CITY: **Stockton** STATE: CA 9-DIGIT ZIP CODE: **95206**

3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:

STREET: **3028 Navy Drive** CITY: **Stockton**

S8 T1N R63 ¼ SECTION **08** TOWNSHIP **01N** RANGE **06E**

INSTALLATION DATE:

4. GENERAL NATURE OF BUSINESS: Ethanol manufacturing.

5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE
(include Permit #'s if known, and use additional sheets if necessary)

The modification will be part of existing permit unit no. N-7365-11.
The modification will be for the installation of new equipment for a corn oil extraction process.
The equipment includes: one 36,000 gallon heat soak tank, three disk-stack centrifuges, one 800 gallon buffer tank, one 1,285 gallon final product tank, and two 10,500 gallon corn oil storage tanks with associated load-out equipment for trucks.
The process takes an existing stream in the wet cake process, our distiller's syrup from the existing evaporator system is fed into this system where corn oil is removed to be used as an additional by-product and all other material is fed back to the distiller's syrup to be used as an animal feed.

6. TYPE OR PRINT NAME OF APPLICANT: Bryon McGregor

TITLE OF APPLICANT: COO

7. SIGNATURE OF APPLICANT:

DATE: 10/28/13

PHONE: (209) 235-0370
FAX: (209) 235-0376
EMAIL: dkoch@pacificethanol.net

For APCD Use Only:

DATE STAMP	*FILING FEE RECEIVED:* $ 19.00 *CHECK#:* 907323
	DATE PAID: 11/7/13
	PROJECT NO: N-1133568 *FACILITY ID:* N-7365

ATTACHMENT E

Previous Title V Operating Permit No.
(N-7365-11-3)

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-7365-11-3 **EXPIRATION DATE:** 09/30/2017

EQUIPMENT DESCRIPTION:
WET CAKE PROCESS CONSISTING OF ONE 194,400 GALLON WHOLE STILLAGE TANK, ONE CENTRIFUGE SYSTEM WITH FIVE CENTRIFUGES, ONE 127,000 GALLON THIN STILLAGE TANK, THREE EVAPORATORS, AND ONE 129,600 GALLON SYRUP TANK, ALL SERVED BY AN KOTCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-4, '-5, '-6, '-9 AND '-10) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-7, '-8, '-9 AND '-10)

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Wet cake conveyors between each tank or each emissions unit at the wet cake process unit shall be fully enclosed. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 60,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All vapors from the wet cake process shall be vented through the vent gas scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The overall control efficiency for the vent gas scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Controlled VOC emissions rate from the wet cake process served by the vent gas scrubber vented to the RTO shall not exceed 0.01161 lb-VOC/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Controlled VOC emissions rate from the slurry tank, yeast tank, liquefaction tank, distillation process, process condensate tank and wet cake process all served by the vent gas scrubber vented to the RTO shall not exceed 0.01161 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.07421 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Fugitive VOC emissions from equipment leaks associated with the wet cake process shall not exceed 2.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit

13. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

14. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted within 120 days after initial start-up and at least once every twelve (12) months thereafter, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit

16. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet) - RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit

17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

18. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

19. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit

20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

21. The vent gas scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

22. The water flow rate through the vent gas scrubber shall not be less than 25 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

23. The permittee shall monitor and record the water flow rate through the vent gas scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

24. If the water flow rate through the vent gas scrubber is less than 25 gal/minute, the permittee shall correct the water flow rate to exceed 25 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the vent gas scrubber continues to be less than 25 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

25. The permittee shall maintain records of (1) the date of water flow rate measurements, (2) the water flow rate through the vent gas scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 25 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

26. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

27. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit

29. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit

30. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

31. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

32. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

33. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

34. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

35. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility wide permit N-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit

36. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit

37. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

38. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

39. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit